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| EXAMINER | |
|---|---|
| ANWAH, OLISA | |
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| 2614 | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/621,715 | PARTOVI ET AL. | |
| | Examiner | Art Unit | |
| | Olisa Anwah | 2614 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *14 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) *1-37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *38-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 38, 39, 43, 47, 55 and 57 are rejected under 35 U.S.C. § 102(b) as being anticipated by Carter et al, U.S. Patent No. 4,608,460 (hereinafter Carter).

Regarding claim 38, Carter discloses a method in a voice response system of receiving input of a keyword, the method comprising:

providing a list of keywords of characters;

receiving from a user a key sequence with a key of the key sequence representing multiple characters;

identifying from the received key sequence without other input from the user those keywords of the list whose initial characters match the possible characters of the received key sequence;

after identifying the keywords of the list that match, outputting an utterance corresponding to each of the identified keywords; and prompting the user to select an identified keyword corresponding to an output utterance; and

after outputting the utterance corresponding to each of the identified keywords, inputting from the user a selection of one of the utterances wherein the keyword corresponding to the selected utterance is the received input (see Figures 5A and 5C).

Regarding claim 39, see Figures 5A and 5C.

Regarding claim 43, see Figures 5A and 5C.

Regarding claim 47, see Figures 5A and 5C.

Regarding claim 55, Carter discloses a voice response system that receives input of a keyword from a user, comprising:

a component that provides a list of keywords of characters;

a component that receives from a user a key sequence with a key of the key sequence representing multiple characters;

a component that identifies from the received key sequence without other input from the user those keywords of the list whose initial characters match the possible characters of the received key sequence;

a component that, after identifying the keywords of the list that match, outputs an utterance corresponding to each of the identified keywords and prompts the user to select an identified keyword corresponding to an output utterance; and

a component that, after outputting the utterance corresponding to each of the identified keywords, inputs from the user a selection of one of the utterances wherein the keyword corresponding to the selected utterance is the received input of a keyword from the user (see Figures 5A and 5C).

Regarding claim 57, see Figures 5A and 5C.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 40-42, 44-46, 48-54 and 56 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carter in view of

McAllister et al, U.S. Patent No. 6,421,672 (hereinafter McAllister).

Regarding claim 40, Carter does not teach the utterances of the identified keywords are output in an order based on a weighting factor. Regardless, Carter covers this feature (see columns 3 and 4). Therefore, it would have been obvious to one of ordinary skill in the art to modify Carter wherein the utterances of the identified keywords are output in an order based on a weighting factor for the utterances as shown by McAllister. This modification would have improved the system's convenience by not requiring the calling subscriber to supply further information as suggested by Carter (see column 6).

Regarding claim 41, Carter does not teach the weighting factor is based on an expected likelihood of the utterance being selected by the user. Regardless, Carter covers this feature (see columns 3 and 4). Therefore, it would have been obvious to one of ordinary skill in the art to modify Carter wherein the weighting factor is based on an expected likelihood of the utterance being selected by the user as shown by McAllister. This modification would have improved the system's convenience by not requiring the calling subscriber to supply further information as suggested by Carter (see column 6).

Regarding claim 42, Carter does not teach the weighting factor is based on an access frequency associated with the utterances. Regardless, Carter covers this feature (see columns 3 and 4). Therefore, it would have been obvious to one of ordinary skill in the art to modify Carter wherein the weighting factor is based on an access frequency associated with the utterances as shown by McAllister. This modification would have improved the system's convenience by not requiring the calling subscriber to supply further information as suggested by Carter (see column 6).

Regarding claim 44, although Carter discloses the key sequence is a dual tone multi-frequency key sequence and wherein the identified keywords represent a constrained recognition grammar; Carter fails to teach the utterances of the identified keywords are output in an order based on a weighting factor. Regardless, Carter covers this feature (see columns 3 and 4). Therefore, it would have been obvious to one of ordinary skill in the art to modify Carter wherein the utterances of the identified keywords are output in an order based on a weighting factor for the utterances as shown by McAllister. This modification would have improved the system's convenience by not

requiring the calling subscriber to supply further information as suggested by Carter (see column 6).

Regarding claim 45, Carter does not teach the method of inputting from the user a selection of one of the utterances includes the user speaking the selected utterance. Regardless, Carter covers this feature (see column 10). Therefore, it would have been obvious to one of ordinary skill in the art to modify Carter wherein the method of inputting from the user a selection of one of the utterances includes the user speaking the selected utterance. This modification would have improved the system's flexibility by enabling the use of DTMF or speech recognition as suggested by McAllister (see column 1).

Regarding claim 46, Carter does not teach the method of inputting from the user a selection of one of the utterances includes the user speaking an alphanumeric character associated with an utterance. Regardless, Carter covers this feature (see column 10). Therefore, it would have been obvious to one of ordinary skill in the art to modify Carter wherein the method of inputting from the user a selection of one of the utterances includes the user speaking an alphanumeric character associated with an utterance. This modification would have improved the

system's flexibility by enabling the use of DTMF or speech recognition as suggested by McAllister (see column 1).

Regarding claim 48, Carter discloses a computer-readable medium encoded with instructions for controlling a voice response system to receive input of a keyword, by a method comprising:

providing a list of keywords of characters;

receiving from the user a key sequence with a key of the key sequence representing multiple characters, each key represented as a dual tone multi-frequency key;

identifying from the received key sequence without other input from the user those keywords of the list whose initial characters match the possible characters of the received key sequence;

after identifying the keywords of the list that match, outputting an utterance corresponding to each of the identified keywords and prompting the user to select an identified keyword corresponding to an output utterance; and

after outputting the utterance corresponding to each of the identified keywords, inputting from the user a selection of the utterances wherein the keyword corresponding to the selected utterance is the received input (see Figures 5A and 5C).

Still on the issue of claim 48, Carter does not explicitly teach the outputted utterance is in an order based on a weighting factor for the utterances. Regardless, Carter covers this feature (see columns 3 and 4). Therefore, it would have been obvious to one of ordinary skill in the art to modify Carter wherein the outputted utterance is in an order based on a weighting factor for the utterances as shown by McAllister. This modification would have improved the system's convenience by not requiring the calling subscriber to supply further information as suggested by Carter (see column 6).

Claim 49 is rejected for the same reasons as claim 41.

Claim 50 is rejected for the same reasons as claim 42.

Regarding claim 51, see Figures 5A and 5C of Carter.

Claim 52 is rejected for the same reasons as claim 45.

Claim 53 is rejected for the same reasons as claim 46.

Regarding claim 54, see Figures 5A and 5C of Carter.

Regarding claim 56, Carter does not explicitly teach the utterances are output before the prompting. All the same, McAllister discloses this limitation (see column 10). And so, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify Carter wherein the utterances are output before the prompting. This modification would have improved the system's reliability by ensuring the user is aware of all the available choices.

***Response to Arguments***

5. Applicant's arguments have been considered but are deemed to be moot in view of the new grounds of rejection.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olisa Anwah whose telephone number is 571-272-7533. The examiner can normally be reached on Monday to Friday from 8.30 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

OA

Olisa Anwah
Patent Examiner
September 17, 2007

Olisa Anwah